

REMARKS**1. Status of the claims**

Claims 6-9, 12, 26, and 29-31 are pending. In its 21 Nov 2008 decision, the Board affirmed the final rejection of each of the claims. Because the claims were not specified as being independently patentable, the Board only addressed the patentability of independent claim 6¹ in view of four different 35 U.S.C. § 103(a) rejections, each based on solely on a different U.S. patent, patent nos. 3,709,538 to Seitz, et al. (“Seitz”), 4,838,586 to Henne (“Henne”), 4,861,078 to Munoz (“Munoz”), and 4,109,819 to Kushman, et. al. (“Kushman”).

2. Request for Reconsideration

Because of points misapprehended or overlooked by the Board in reaching its decision, Applicants respectfully request that the Board reconsider and reverse that decision, hold claims 6-9, 12, 26, and 29-31 to be patentable in view of the art of record and the other statutory requirements for patentability, and return the application to the Examiner with direction to issue a Notice of Allowance.

3. Reversal of the Final Rejection in view of Seitz

In affirming the final rejection in view of Seitz, the Board made four findings of fact (FF4-7) related to Seitz. At least two of these factual findings, FF4 and FF5, appear to reflect a misapprehension of Seitz. Specifically, on page 5 the decision states:

“We understand bushing 23 of Seitz to be positioned between rod 21, which is part of the top of the container, and bore 18, which is part of the bottom of the container. (FF5). Thus, a compression movement between the top and bottom sections of the container in Seitz would be absorbed, at least in part, by bushing 23.”

¹ Claim 6 reads as follows:

A latch system for a container, the container including a first section and a second section, the latch system comprising:
a latch pin mounted in the first section; and
a deflectable member mounted in a latch, with the latch pivotally coupled to the latch pin so that the deflectable member is positioned between the latch pin and a portion of the latch;
wherein the latch is structured to removably engage the second section, and the deflectable member is configured to absorb relative compression movement between the first section and the second section.

This understanding is incorrect for the simple reason that bore 18 is not part of the bottom of the container but is instead part of the latch 14 of Seitz. See Seitz, Figures 2 and 4; col. 4, ll. 29-33. More importantly, because of this configuration, any compression between the top and bottom sections of Seitz's container would have absolutely no effect on either bushing 23. Indeed, if not for the upward biasing of horizontal leg 15 of latch 14 provided by spring 32 of Seitz, any compression that might be experienced between the top and bottom sections of Seitz's container would not be translated to latch 14.

It is also worth noting that there is nothing in Seitz that contemplates further compression² between the top and bottom sections of the container once the top and bottom sections are closed together. On the other hand, in the context of Applicants' invention, it is exactly such secondary compression between two already-latched sections of a container that the instant latch is designed to address.

As for the bushings 23 of Seitz, Applicants also note that they are not "mounted onto the ends of the bore [18]" (Decision, p. 4, FF4). Instead, with reference to a drawing, Seitz teaches that "FIG. 3 depicts bushings 23 mounted on the ends 24 of rod 21" and that "the bushings 23 are suitably retained to rod 21". Seitz, col. 2, ll. 54-55 and l. 58. Significantly, Seitz then explains, "The L-shaped member 14 pivots around the outer peripheral wall of bushings 23. The rod 21 therefore does not act as an axle." Id., ll. 59-61 (emphasis added).

What all of this means, of course, is that the rod 21 of Seitz is not an axle – or a "latch pin"; instead it is simply a structure that fixedly holds the two bushings 23 on its ends so that the latch 14 can rotate about the stationary bushings. Indeed, as those in the art will appreciate, the rod 21 of Seitz need not be round, as it itself does not provide for rotation of latch 14 in relation to the top and bottom of the container. As an example, while the bore 18 could have a round cross-section (at least in those areas designed to engage the bushings 23) and a longitudinal slot 19 to allow the latch 14 to be associated with rod 21, rod 14 could, for example, have a square cross-section. Of course, in such an embodiment the portions of the bushings 23 designed to engage the square rod ends would likewise be of square cross-section, although their outer

² Applicants have long-recognized, and do not dispute, that many solid materials, even those that are extremely strong and rigid, are capable of a certain degree of "compression" or "deflection" upon application of significant force. That a solid bushing made from rigid material may slightly "deflect" or "compress" under a significant load is also not in dispute.

surfaces would be cylindrical and sized to fit inside bore 18 in order to allow the latch 14 to rotate about them.

Applicants respectfully submit that when Seitz is properly understood it becomes clear that the cited patent does not anticipate, suggest, or teach a latch mechanism that includes a latch pin associated with a deflectable member to absorb further compression between first and second sections (e.g., the top and bottom halves) of a container after the latch has already been closed. For this reason the 35 U.S.C. § 103(a) final rejection premised on Seitz should be reversed.

4. Reversal of the Final Rejection in view of Henne

Applicants respectfully request that the Board also reverse its affirmation of the final 35 U.S.C. § 103(a) rejection in view of the patent to Henne (U.S., patent no. 4,838,586) as the Board's decision appears to reflect a misapprehension as to what Henne actually discloses. Put simply, while Henne certainly discloses an oven-door latch that includes among its many parts a bushing 66 disposed about a pin 30, Henne's bushing 66 is not, in fact, "configured to absorb relative compression movement or movement of the lid [oven door] toward the oven body". Decision, p. 10, second paragraph (quoting the Examiner's Answer, p. 5). To the contrary, the bushing 66 disposed around pin 30 in the elongated slot 31 of the latch arm simply facilitates movement of latch arm 20 as the latch arm rotates about the pin 30 and slides inward during the process of closing the latch to seal an oven door against the body of an oven. As Henne explains, its improved latch mechanism allows an oven door to be latched in either of two positions, one for normal cooking uses such as baking and another for pyrolytic self-cleaning. In short, Henne's latch "prevents inadvertent latching of the oven door when it is not in a self-cleaning mode." Henne, col. 1, ll. 58-61.

As for Applicants' alleged failure to explain why the lateral movement of latch arm 20 "would not also allow bushing 66 to absorb some of the compression movement" (Decision, p. 10, third paragraph, last sentence), the reason for this is simple: it is self-evident from Figures 3, 5, and 6 of Henne that the bushing 66 does not absorb compression movement. This must be the case for the simple reason that, as shown in Henne Figures 3 and 4, when the latch is closed in either of its two locked positions (i.e., one for baking, another for self-cleaning), the oven door is also closed, and when the door is closed, any further "compression" of the door against the oven

would simply either (1) result in the strike plate of the door sliding along the cut-out 68 in the latch arm 20, or (2) push the latch arm 20 further into the latch, as the elongated slot 31 of the latch arm specifically provides for exactly this sort of lateral translation, without any “compression” effect on the bushing 66 . Indeed, nowhere does Henne suggest that when the latch is in the “closed” or “locked” position that configuration prohibits the oven door from being pressed more closely to the oven, meaning that the latch arm 20 would not necessarily “bottom out” against bushing 66. Also, when “the cut-out 68 in latching arm 20 engages a strike plate on the oven door (not shown) motion of the latch arm will be halted” (Henne, col. 4, ll. 16-18), meaning that the strike plate on the oven door, once engaged by the latch arm 20, prevents the latch arm from further rotation; however, such engagement does not necessarily prevent the door from moving between the vertical walls in the cut-out 68. Indeed, with reference to Figures 3 and 4 of Henne and as those in the art will appreciate, in the configurations disclosed by Henne, when an oven door is pressed tightly against the oven by a closed latching mechanism 10, that portion of the strike plate (not shown in Henne) on the front (or outer) surface of the oven door will bear against the vertical wall of cut-out 68 most near the distal end of latch arm 20, leaving a gap between that portion of the strike plate (not shown) on the inner oven-facing surface of the oven door that would allow for further “compression” of the oven door toward the oven. As those in the art will understand, unless and until that gap was “closed” by further compression of an already closed, latched over door, the question would not even arise as to whether the latch arm 20 had moved laterally a sufficient distance to bring the bushing 66 to bear against the curved wall of the elongated slot 31 nearest the end of latch arm 20 having the cut-out 68.

Applicants respectfully submit that the foregoing explanation reveals that the Office has heretofore misapprehended what Henne would, in fact, suggest or teach to the ordinarily skilled artisan. When reconsidered in its proper context, it is clear that Henne’s mere disclosure of a “bushing” in a latch mechanism otherwise unrelated to the invention of instant claim 6 in no way renders Applicant’s invention obvious. Given this, the 35 U.S.C. § 103(a) final rejection based on Henne should be reversed.

5. Reversal of the Final Rejection in view of Munoz

Applicants also respectfully request that the Board reconsider and reverse the affirmation of the final 35 U.S.C. § 103(a) rejection in view of the patent to Munoz (U.S., patent no. 4,861,078). As appreciated by the Office, Munoz and Henne provide effectively equivalent disclosure in the context of Applicant's claimed invention. The two patents are commonly owned, were filed on the same date, contain much of the same disclosure, and share a number of figures in common. Indeed, in terms of relevance to Applicants' invention, there is nothing in Munoz that is not also disclosed in Henne. As Applicants have shown above, when Henne is properly understood, it does not render any of the pending claims obvious. The same is true of Munoz. Accordingly, the 35 U.S.C. § 103(a) final rejection premised on Munoz should also be reversed.

6. Reversal of the Final Rejection in view of Kushman

The last of the four 35 U.S.C. § 103(a) rejections affirmed by the Board concerned Kushman. Applicants respectfully argue that Kushman is easily distinguished from the instant invention. There is no question that Kushman discloses a quick-release vent structure adapted to rapidly release a pressure buildup in a vessel such as a silo in order to prevent explosions. Kushman describes the structures for accomplishing this as "spring-loaded, snap action clamps" (see, e.g., Kushman, abstract), which are diagrammed in Figures 4-8 of the cited patent. There is also no dispute that Kushman discloses, "A bearing or bushing 41 may be provided to take the relative rotation between latch member 34 and axle 39 (see FIG. 7)". Kushman, col. 4, ll. 50-52. What is in dispute, however, is whether the disclosure of a "bearing or bushing 41 ... to take the relative rotation between latch member 34 and axle 39" would suggest to the ordinarily skilled artisan a structure for absorbing relative downward compression of the roof.³

Applicants respectfully submit that one of ordinary skill in the art would not understand bearing 41 of Kushman to be suited for absorbing relative compression. To the contrary, Kushman teaches that resilient gasket strips (element 27 in Figures 4 and 5) attached a roof panel

³ Applicants note an apparent misprint in the Board's decision in the last sentence of page 13, first complete paragraph, the last portion of which states, "Appellants have not explained why this movement would not also allow bushing 66 to absorb some of the compression movement". While the Board, in its decision, refers to "bushing 66, Applicants understand the Board to have intended to refer to "bearing or bushing" 41.

20 (i.e., not the part or section to which the latch is attached, as required by Applicants' claim 6) can be used to help seal the roof panel against rim 23 of the roof framework of the silo.

Kushman, col. 4, ll. 1-15. Also, as shown in Figure 4 of Kushman, when the over-center clamps are in the "closed" or "locked" position (securing the roof panels to the silo), the latch member 34 is positioned such that "compression" (or decompression), if any, occurs to resilient gasket strips 27; not to bearing 41 or axle 39.

It is also important to note that the "snap action" or "over-center" clamp mechanisms of Kushman serve exactly the opposite role of the shock-resistant latches described and claimed by Applicants. This is no better illustrated than by the descriptions in Kushman that the clamps described therein are designed to partially open to relieve pressure build-up in silo and, if necessary, to completely release the roof panels in the event of an explosion or other significant, rapid pressure increase in order to prevent wholesale destruction of the silo (or other vessel). See, e.g., Kushman, col. 1, ll. 4-10; col. 2, ll. 32-60; col. 6, ll. 10-34. In other words, Kushman's clamps are designed to open, partially or completely, in response to a "shock", such as an explosion. In contrast, in Applicants' invention the latch design prevents the latch from opening in response to a shock that compresses a container's top and bottom sections together, such as may occur, for example, when a case employing such latches is inadvertently dropped on the ground.

Applicants respectfully contend that when Kushman is properly understood, it does not provide the basis for a sustainable rejection under 35 U.S.C. § 103(a). For this reason Applicants implore the Board to reconsider its decision with regard to this reference and reverse the Examiner's final rejection.

7. "Deflection" or "compression" does not equal a "deflectable member"

Before closing, Applicants wish to address the issue that seems to underlie each of the rejections at issue, namely whether a solid, rigid "bushing" or "bearing" disclosed in any of Seitz, Henne, Munoz, or Kushman suggests to those ordinarily skilled in the art the inclusion of a "deflectable member" to "absorb relative compression" between two sections of a container. The Office argues that the solid, rigid "bushing" or "bearing" disclosed in each of the four cited patents is a "deflectable member", as required by Applicants' invention. Applicants respectfully

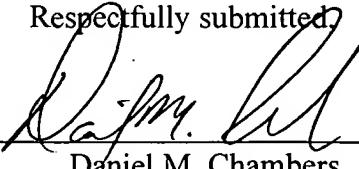
disagree.

To begin with, in their specification Applicants note that, “In contrast to conventional latch systems that are rigidly mounted, … the latch system of the present invention can absorb” relative compression between two sections of a container when, for instance, the container is dropped. See Specification, p. 7, ll. 21-23 (emphasis added). Thus, Applicants appreciated and explained the difference between “rigidly mounted” conventional latch systems in the art and the latches of the instant invention.

Additionally, Applicants note that the inclusion of a rigid bearing or bushing about a solid, rigid retainer for the bearing or bushing would not suggest to the ordinarily skilled artisan a structure that contains a “deflectable member” positioned between the latch pin and another portion of the latch. Instead, the limit of any such “suggestion” is the inclusion of a solid rigid bushing to assist in rotation (as in Seitz and Kushman) or to reduce wear between components that rub or make contact. The Office has introduced absolutely no evidence from any reference that those in the art would understand a solid, rigid bushing to be equivalent to a “deflectable member” as described by Applicants. Indeed, following the Office’s line of reasoning, any solid, rigid latch pin, shaft, or axle should also have sufficient “deflectable” qualities. Of course, any such configuration would not provide the shock-resistance of Applicants’ claimed latch system. Applicants fail to understand how merely adding another solid, rigid element – a rigid bearing or bushing – to a retainer, latch pin, or shaft, substantively adds anything from the standpoint of a “deflectable member”. If the Office persists in maintaining any of the final rejections, a reasoned explanation of its position would be most appreciated.

Respectfully submitted,

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